

Mineral Industry Surveys

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MANGANESE IN MAY 1999

In May, reported consumption of manganese ore containing 35% or more manganese, exclusive of that at iron and steel plants, was 39,900 metric tons, which was an increase of about 8% compared with that of the previous month, according to the U.S. Geological Survey. This brought the revised year-to-date total to 192,000 tons. These figures increase to 44,400 tons and 215,000 tons when estimates for annual respondents are added on the basis of 1997 data. Corresponding industry stocks of ore at the end of the month were 137,000 tons, which includes an estimate for annual respondents on the basis of 1997 data. This was a marginal decrease of about 1% compared with the corresponding figure for stocks at the end of April. (Data for the most recent 13 months are shown on page 2.)

Data for domestic consumption and stocks of manganese ferroalloys and metal for the April through June quarter of 1999 will appear in a subsequent monthly report.

Foreign trade data for May will appear in a subsequent report. For April, the data tabulated in this report indicated that for silicomanganese the volume of imports was the greatest since May 1998 while that for exports was the least since November 1997. **Note:** For early availability, the trade data appearing in this report are being placed on MINES FaxBack in preliminary form. The data for April were placed on FaxBack as of June 28.

The FaxBack document number for the May trade data will be 420205.

The Defense Logistics Agency, U.S. Department of Defense, reported no cash disposals of manganese materials from the National Defense Stockpile for May.

Update

The April/June 1999 special issue (v. 20, no. 2-3) of *NeuroToxicology* contains thirty-three peer-reviewed papers related to the toxicity of manganese. These papers are based on presentations made to the Fifteenth International Neurotoxicology Conference held in Little Rock, AR, in October 1997. The journal *NeuroToxicology* is published by Intox Press, Inc., of Little Rock, telephone number (501) 227-8622, e-mail address neurotox@neurotoxicology.com.

This journal issue also contains an announcement of The Manganese 2001 Health Issues Symposium that is to be held in conjunction with the INFACON NINE meeting in June 2001. This symposium is co-sponsored by The International Manganese Institute and The Ferroalloys Association Manganese Subcommittee, who also helped sponsor the 1997 conference. Information about the INFACON meeting is available via the Internet at the address www.infacon.com.

TABLE 1
SELECTED U.S. FOREIGN TRADE IN MANGANESE 1/

(Metric tons, manganese content) 2/

	Imports for consumption			Exports		
	Ore and dioxide	Ferroalloy and metal	Total	Ore	Ferroalloy and metal	Total
1998: 3/						
April	9,820	40,100	49,900	81	2,190	2,270
January-April	48,800	168,000	216,000	554	7,900	8,460
1999:						
January	16,300 4/	48,300 4/	64,600	3,010	1,850	4,860
February	17,900 4/	40,700 4/	58,700	13	1,160	1,170
March	22,100 4/	40,100 4/	62,200	75	1,500	1,570
April	18,300 4/	39,800 4/	58,100	4,980	1,250	6,240
Total	74,600	169,000	243,000	8,080	5,760	13,800

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ As reported except as estimated for imports of manganese dioxide and manganese waste and scrap and for exports from gross weights.

3/ Data may include revisions by the Bureau of the Census.

4/ All or part of these data have been referred to the Bureau of the Census for verification.

Source: Bureau of the Census.

TABLE 2
U.S. IMPORTS FOR CONSUMPTION OF SILICOMANGANESE IN APRIL 1999 1/

(Metric tons)

Source	Gross weight	Mn content	Customs value	Year to date		
				Gross weight	Mn content	Customs value
Australia	11,100	7,650	\$4,080,000	17,900	12,100	\$6,540,000
France	--	--	--	4,240	2,800	1,810,000
India	1,530	1,030	543,000	1,530	1,030	543,000
Kazakhstan	3,000	2,010	1,200,000	7,180	4,850	2,730,000
Mexico	9,840	6,460	4,190,000	27,300	17,900	11,600,000
South Africa	4,310	2,910	1,650,000	29,200	19,800	11,300,000
Venezuela	3,800	2,480	1,390,000	5,200	3,390	1,900,000
Total	33,600	22,500	13,100,000	92,500	61,800	36,500,000
Total, general imports	33,600	22,500	13,100,000	91,900	61,400	36,200,000

1/ Data are rounded to three significant digits; may not add to totals shown.

Source: Bureau of the Census.

TABLE 3
U.S. IMPORTS FOR CONSUMPTION OF FERROMANGANESE IN APRIL 1999 1/

(Metric tons)

Source	Gross weight	Mn content	Customs value	Year to date		
				Gross weight	Mn content	Customs value
Low carbon:						
China	259	214	\$203,000	719	602	\$642,000
Italy	18	16	16,200	551	495	832,000
Japan	--	--	--	4,000	3,420	3,660,000
South Africa	20	19	38,200	564	524	976,000
Total, low carbon	297	248	257,000	5,830	5,040	6,100,000
Total, general imports of low carbon	297	248	257,000	5,830	5,040	6,100,000
Medium carbon, 1%-2% C:						
France	--	--	--	20	16	8,630
Korea, Republic of	--	--	--	2,850	2,330	1,670,000
Mexico	5,970	4,780	3,330,000	12,600	10,100	7,360,000
Norway	--	--	--	20	9	18,600
South Africa	500	403	276,000	11,100	9,020	6,740,000
Total, m.c., 1%-2% C	6,470	5,190	3,610,000	26,600	21,500	15,800,000
Total, general imports of m.c., 1%-2% C	6,470	5,190	3,610,000	26,600	21,500	15,800,000
High carbon:						
Australia	883	687	808,000	883	687	808,000
Brazil	--	--	--	5,290	3,990	1,950,000
China	2,000	1,500	721,000	2,000	1,500	721,000
France	11,700	8,200	6,020,000	45,200	34,500	24,600,000
South Africa	300	232	111,000	44,800	34,900	17,900,000
Total, high carbon	14,800	10,600	7,660,000	98,200	75,500	46,000,000
Total, general imports of high carbon	14,800	10,600	7,660,000	98,200	75,500	46,000,000
Grand total	21,600	16,100	11,500,000	131,000	102,000	67,900,000
Grand total, general imports	21,200	16,100	11,500,000	131,000	102,000	67,900,000

1/ Data are rounded to three significant digits; may not add to totals shown.

Source: Bureau of the Census.

TABLE 4
U.S. IMPORTS 1/ OF MANGANESE ORE (20% OR MORE MN) IN APRIL 1999 2/

(Metric tons)

Source	20% - 47% Mn		47% or more Mn		Total	
	Gross weight	Mn content	Gross weight	Mn content	Gross weight	Mn content
Australia	--	--	1,100 3/	621 3/	1,100	621
China	--	--	20	15	20	15
Gabon	--	--	12,600 3/	2,770 3/	12,600	2,770
Ghana	26,100	10,200	--	--	26,100	10,200
Mexico	4,960	1,870	1,090	523	6,050	2,390
Total	31,100	12,100	14,800	3,930	45,900	16,000
Year to date:						
Australia	--	--	1,100	621	1,100	621
Belgium	--	--	2	2	2	2
China	--	--	40	33	40	33
Gabon	10,000	5,200	76,600	30,400	86,600	35,600
Ghana	26,100	10,200	--	--	26,100	10,200
Mexico	7,060	2,700	1,090	523	8,150	3,220
Morocco	--	--	20	11	20	11
South Africa	--	--	32,500	16,300	32,500	16,300
Total	43,200	18,100	111,000	47,900	155,000	66,000

1/ Quantities for general imports and imports for consumption are identical.

2/ Data are rounded to three significant digits; may not add to totals shown.

3/ All or part of these data have been referred to the Bureau of the Census for verification.

Source: Bureau of the Census.

TABLE 5
U.S. IMPORTS FOR CONSUMPTION OF MANGANESE DIOXIDE AND MANGANESE METAL IN APRIL 1999 1/

(Metric tons, gross weight)

Source	Manganese dioxide				Manganese metal			
	Quantity	Customs value	Year to date		Unwrought		Other	
			Quantity	Customs value	Quantity	Year to date	Quantity	Year to date
Australia	1,980	\$2,790,000	7,410	\$10,400,000	--	--	--	--
Belgium	36	52,600	220	364,000	--	--	--	--
Canada	--	--	--	--	--	--	--	(2/)
China	--	--	4	7,000	40	876	233	340
France	--	--	23	68,500	--	--	6	14
Germany	10	54,900	23	127,000	18	138	11	35
Greece	--	--	16	21,500	--	--	--	--
India	--	--	--	--	--	--	16	16
Ireland	465	664,000	1,930	2,710,000	--	--	--	--
Japan	--	--	16	21,400	--	--	(2/)	(2/)
Mexico	--	--	--	--	--	--	20	20
Netherlands	--	--	--	--	--	--	3	18
South Africa	1,310	1,860,000	4,570	6,490,000	831	3,460	--	--
Spain	--	--	--	--	--	36	--	--
United Kingdom	41 3/	153,000 3/	81	206,000	19 3/	151 3/	--	--
Total	3,840	5,570,000	14,300	20,400,000	908	4,660	290	444
Total, general imports	3,840	5,570,000	14,300	20,500,000	962	4,860	290	444

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Less than 1/2 unit.

3/ All or part of these data have been referred to the Bureau of the Census for verification.

Note: Imports for consumption of metallic manganese waste and scrap totaled 6 tons, all of which was from Canada, to give a year-to-date total of 38 tons.

Source: Bureau of the Census.

TABLE 6
U.S. EXPORTS OF MANGANESE ORE (20% OR MORE MN), FERROMANGANESE,
SILICOMANGANESE, AND MANGANESE METAL BY COUNTRIES OF DESTINATION IN APRIL 1999 1/

(Metric tons, gross weight)

	Manganese ore		Ferromanganese, 2% or less C		Silicomanganese		Manganese metal 2/	
	April	Year to date	April	Year to date	April	Year to date	April	Year to date
Australia	--	45	--	--	--	4	--	--
Belgium	--	685	--	--	--	--	--	39
Brazil	--	--	--	--	--	--	26	84
Canada	48	241	366	1,490	235	1,310	125	475
Colombia	650	1,300	--	--	--	--	--	--
France	--	487	--	--	--	9	--	--
Germany	1,080	1,920	--	--	--	--	--	--
India	--	--	--	--	--	--	1	1
Israel	1,130	1,850	--	--	--	--	--	--
Italy	510	1,020	--	--	--	--	--	4
Japan	--	--	--	--	--	--	76	270
Korea, Republic of	129	129	--	--	--	--	--	11
Mexico	--	--	3	17	--	8	14	49
Netherlands	--	466	--	--	--	19	--	36
Peru	--	36	--	--	--	--	--	--
Spain	--	--	--	--	--	10	--	--
Switzerland	650	650	--	--	--	--	--	39
Sweden	68	68	--	--	--	--	--	--
Taiwan	569	569	--	--	--	--	(3/)	(3/)
United Kingdom	5,130	6,700	--	--	--	--	--	214
Total	9,970	16,200	369	1,510	235	1,370	242	1,220

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Includes manganese-aluminum, some other alloys, and waste and scrap.

3/ Less than 1/2 unit.

Note: Exports of ferromanganese with more than 2% carbon totaled 716 tons, all of which went to Canada, to give a year-to-date total of 3,090 tons.

Source: Bureau of the Census.

TABLE 7
U.S. FOREIGN TRADE IN SELECTED MANGANESE CHEMICALS IN APRIL 1999, BY CLASS 1/

Class	Gross weight (metric tons)	Value 2/ (thousands)	Principal sources and destinations: gross weight (metric tons); value (thousands) 2/	Year to date		
				Gross weight (metric tons)	Value 2/ (thousands)	Principal sources and destinations: gross weight (metric tons); value (thousands) 2/
<u>Imports for consumption:</u>						
Manganese oxides other than dioxide	253	\$125	Mexico 190; \$34	622	\$685	Mexico 280; \$62
Sulfates, basket category, including manganese sulfate	2,380	1,430	Mexico 1,720; \$913	15,800	7,900	Mexico 8,720; \$4,270
Potassium permanganate	104	192	Czech Republic 70; \$126	431	790	Czech Republic 230; \$423
Manganites, manganates, and other permanganates	--	--	--	(3/)	3	United Kingdom (3/); \$3
<u>Exports:</u>						
Manganese dioxide	309	216	Canada 256; \$104	1,960	2,400	Canada 876; \$439
Manganese oxides other than dioxide	291	238	Canada 212; \$87	1,390	1,580	Canada 917; \$368
Sulfates, basket category, including manganese sulfate	1,590	638	Canada 1,390; \$448	7,340	2,950	Canada 6,230; \$1,920
Potassium permanganate	125	278	Germany 47; \$109	389	665	Canada 118; \$223
Manganites, manganates, and other permanganates	31	204	United Kingdom 29; \$191	116	592	United Kingdom 59; \$393

1/ Data are rounded to three significant digits.

2/ For imports, Customs value; for exports, f.a.s. value.

3/ Less than 1/2 unit.

Source: Bureau of the Census.